Use Attainability Analysis

for

WBID 0528 Shoal Creek

Submitted by Tetra Tech, Inc

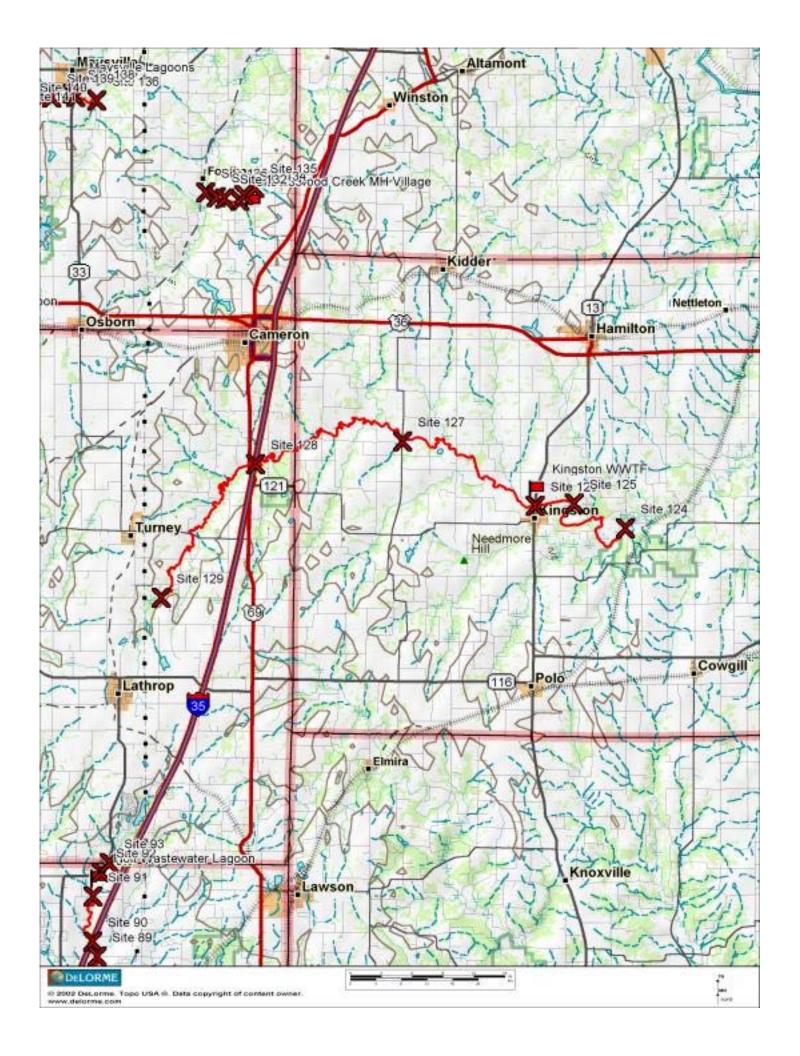
To Missouri Department of Natural Resources Water Protection Program

APR 0 6 2005

Data Sheet A - Water Body Identification

WATER PROTECTION PROGRAM

	Water Body Name:
	(from USGS 7.5' quad) SHOAL CAREK! 124-129
	8-digit HUC: 10280101
	Missouri WBID #: 05 28
	County: Nobaway
	Upstream Legal Description:
	Downstream Legal Description:
	Upstream Coordinates: (UGS 84, ddd.dddd) 39.60081 -094.28216
	Downstream Coordinates: (UGS 84, ddd.ddddd) 31. [4227 -013. 1131
	Discharger Facility Name(s): KINGSTON WWTF
	Discharger Permit Number(s): mp-0120405
	Number of Sites Evaluated: 6
	Name of Surveyor and Telephone Number: CHAO BANGOVA, 410-356-8993
	Organization: TETAN TECH INC.
	Position: Associated Scientist
	he undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA tasheet is true and accurate.
Si	med:



Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: 124				Site Locati			
Site GPS Coordinates:	v39.64027 WO	3,49136	A667 151194	BONAN28	4 (N.D.)	OVERPASS.	
Date & Time: 03-16-0:					me: K	INGSTON WHITE	
Personnel: CHAN BAKE		occen		Permit Nur	mber:		
Current Weather Condi	tions: 444 F, Sun	اس		Weather C	onditio	ens for Past 7 days:	
Photo Ids: Upstream:			am: 157	76	Other:		
ses Observed*:							
Swimming (xc)	☐ Skin diving	,	□ sct	JBA diving		☐ Tubing	☐ Water skiing
☐ Wind surfing	☑ Kayaking		☐ Boa			₩ading	☐ Rafting
☐ Hunting	Trapping co		Fish			☐ None of the above	☐ Other:
Describe: (include num SPONE TO LOCAL OF FOREST.	ber of individuals That SAID F	ት TIØN P	HAS KA	valed The	5 A II	veh. Stre Jukkoumi	EN BY AGATCULTURE
SPORE TO LUCAL o fonest. urrounding Condition	THAT SAJOF	TEND	HAS KA	VALED THE	5 A II	VEN. STTE JUKKOUNDO	EN BY NGNACULTUNE
ofonest.	THAT SAJOF	at promo	HAS KA	VALED THE	onal us	VEN. STTE JUKKOUNDO	nce or unusual
SPORE TO LUCAL o Fongs T. urrounding Conditions of interest.)	THAT SAID F	at promo	HAS KA	vArco Teac	onal us	es. Attach photos of evide	nce or unusual
urrounding Conditions of interest.)	ons*: (Mark all th	at promo	HAS KA	vArco Teached recreation larests	onal us	es. Attach photos of evide	nce or unusual Campgrounds Stairs/walkway
urrounding Condition ems of interest.) ☐ City/county parks ☐ Boating accesses ☐ No trespass sign	Ons*: (Mark all th	at promo	ote or important of the or important of the or important of the original orig	vArco Teached recreation larests	onal us	es. Attach photos of evide Urban areas Nature trails	nce or unusual Campgrounds Stairs/walkway
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Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

^{*}Some of this information is not intended to directly influence a decision on any one particular recreational use analysis but may point to conditions that need further analysis or that effect another use.

Page Two – Data Sheet B for WBID #_______

☐ Riffle	Width (t):	Leng	gth (ft):	Α	vg. Depth	(ft):	Max. Depth (ft):	
☑ Run	Width (ît): 5,4m	Leng	gth (ft): 70	\sim A	vg. Depth	(ft): 0.22m	Max. Depth (ft):).4 _m
□ Pool	Width (t):	Leng	gth (ft):	A	vg. Depth	(ft):	Max. Depth (ft):	
Flow	Present?	☑ Yes	□ No		E	stimated (1	ft³/sec): 47 =55	4n=6s:4n=5>	
Downstrea	om Vio	w Dhysical	Dimon	ciona. A				FLOW = 0.30 mb	
☐ Riffle	Width (gth (ft):		vg. Depth		Max. Depth (ft):	· · · · · · · · · · · · · · · · · · ·
☑ Run		t): 3.5m		gth (ft): O			(ft): 0.43 _m	Max. Depth (ft):	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
☐ Pool	Width (gth (ft):		vg. Depth		Max. Depth (ft):	J.6M
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ater Chara					□ Chem	nical	None	Other	
ater Chara		□ Sewage	. 🗆 N	Ausky	☐ Chem	nical	None	Other:	
odor:		□ Sewage □ Clear	□ N Ø (Ausky Breen	☐ Gray		Milky	☐ Other:	
Odor: Color: Bottom Dep	posit:	□ Sewage □ Clear □ Sludge	□ N ☑ ()	Musky Preen Solids	☐ Gray	sediments	Milky □ None	☐ Other:	
odor:	posit:	□ Sewage □ Clear	□ N ☑ ()	Ausky Breen	☐ Gray	sediments	Milky	☐ Other:	
Odor: Color: Bottom Dep	posit:	□ Sewage □ Clear □ Sludge □ Oil		Musky Green Solids Scum	☐ Gray ☐ Fine s	sediments	☑ Milky ☐ None ☑ None	☐ Other:	
Odor: Color: Bottom Der Surface Der	posit: posit: Please a	□ Sewage □ Clear □ Sludge □ Oil ttach additi		Musky Breen Solids Scum mments (☐ Gray ☐ Fine s ☐ Foam	sediments	✓ Milky ☐ None ☑ None ion from inter	☐ Other: ☐ Other: ☐ Other: ☐ Other:	
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odor: Color: Bottom Der Surface Der mments: In the information on the re the understasheet is the surface in th	posit: Please a pon is not understante are are an implementation of the control	□ Sewage □ Clear □ Sludge □ Oil ttach addition be used solding of water a use analysis thereby affid accurate	Sional conditions but may	Musky Green Golids Grum The moval of a ns. Consect point to co he best o	☐ Gray ☐ Fine s ☐ Foam including recreational quently, this nditions that	information information information information information in the control in the	Milky None None None ion from internation but rather on is not intended her analysis or the	Other: Other: Other: views) to this form. is to provide a more to directly influence a at effect another use. nation reported on	





Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: 12			Site Location	Description:	
Site GPS Coordinates:	139.65 228 WO	14.01112 FI	THE SAMES	no, overplass.	
Date & Time: 03-16-05	1340			E KINGSTON WWTF	
Personnel: CHAD BANG	DUR, JERAMY A	obee~	Permit Numb		
Current Weather Condi	tions: 49°F, Sunn	4	Weather Con	litions for Past 7 days:	
Photo Ids: Upstream: i	5786 Do	wnstream: s	29 01	her:	
es Observed*:					
☐ Swimming	☐ Skin diving	□ so	CUBA diving	☐ Tubing	☐ Water skiing
☐ Wind surfing	☑ Kayaking	□во	oating	☐ Wading	☐ Rafting
☐ Hunting	☐ Trapping	☐ Fi	shing	☐ None of the above	□ Other:
Describe: (include number of the to Lacal U. By AGNICULTUNG	TANT OCAL ON	Freeding, frequency	Jency of Use, pho	to-documentation of evidence S Kayays The Croek,	e of recreational uses, etc AAGA SUNADVAVICA
By AGNICULTUNG	+ FOREST.	Freed Fr	TH 36 GNOT	to-documentation of evidence KAYAKS THE CREEK. Luses. Attach photos of evidence	AREA SUNFOUNTED
BY AGNICULTUNG	+ FOREST.	promote or in	TH 36 GNOT	S Kayars the crofk.	Area sunformed
By AGNICULTUNG rrounding Conditions of interest.)	To 1430 That Folicit. Folicit. Mark all that	promote or in	npede recreationa	uses. Attach photos of evide	ence or unusual Campgrounds
Trounding Conditions of interest.)	ns*: (Mark all that	promote or in	npede recreationa onservation lands	uses. Attach photos of evide Urban areas Nature trails	ence or unusual Campgrounds Stairs/walkway
rrounding Conditions of interest.) City/county parks Boating accesses No trespass sign	ns*: (Mark all that) Playgrounds State parks	promote or in MDC co	npede recreationa onservation lands	uses. Attach photos of evide	ence or unusual Campgrounds Stairs/walkway
rrounding Conditions of interest.) City/county parks Boating accesses No trespass sign	ns*: (Mark all that) Playgrounds State parks	promote or in MDC co	npede recreationa onservation lands	uses. Attach photos of evide Urban areas Nature trails	campgrounds
rrounding Conditions of interest.) City/county parks Boating accesses No trespass sign	ns*: (Mark all that Playgrounds State parks Fence	promote or in MDC co Nationa Steep slo	npede recreationa onservation lands I forests opes	Urban areas ☐ Nature trails ☐ Other: A(ATTCULTUM)	ence or unusual Campgrounds Stairs/walkway

other items that may be of interest. (Include photographs)

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03/16/05

Page Two - Data Sheet B for WBID # 125

Stream Morp Upstream '			mensions:	0 .≤⊋,	0,46, Q	40,0.40	, 0.1m		•	
	Width (fi		Length (vg. Depth		***************************************	Max. Depth (ft)) :
図 Run	Width (fi):11·3 ^w	Length (ft): 20	n F	vg. Depth	(ft): 0,36~		Max. Depth (ft)	: 0.52 ₂₂
□ Pool	Width (fi):	Length (ft):	P	vg. Depth	(ft):		Max. Depth (ft)	
☑ Flow	Present?	☑ Yes	□ No		· E	stimated (1	ft³/sec): 4 _m :	-16s:	4~=176:41~=175	
Downstrea	m Vion	, Dhysical	Dimonsio	10. 0.4				Į	FLOW: 0.74 als	
	Width (fi		Length (vg. Depth			Max. Depth (ft)	:
	Width (fi): 1.8m	Length ((ft): 0.24~	·	Max. Depth (ft)	
	Width (fi		Length (;	·····	vg. Depth		`	Max. Depth (ft)	
☑ Flow	Present?	☑ Yes	□ No		. E	stimated (1	ft³/sec): ५,,;	145!	4n=12s: 4n=15	S .
	·				*				w= 0.29~15	
Substrate*: (These va		dd up to 100 Gravel	%.) 40	% Sand	<u> </u>	% Silt	10	% Mud/Clay	% Bedrock
Vater Chara					☐ Chen	-iaal	☑ None		☐ Other:	
Color:		Sewage	☐ Musi ☐ Gree				Milky			
Bottom Depo		Clear			☐ Gray	sediments			Other:	
Surface Dep		□ Sludge □ Oil	☐ Solid		☐ Foan		□ None □ None		☑ Other: SA~	<u> </u>
- January 20p		<u> </u>	Li Sculi		LI FOAIL		E None		Li Omer:	
Comments: P	lease at	tach additi	onal comm	ents (including	informat	ion from i	nterv	iews) to this for	m.
omprehensive u	nderstan	ding of water	conditions.	Conseq	uently, this	informatio	on is not inte	nded t	to provide a more to directly influence effect another use.	
f, the undersignates is to the control of the contr				best of	f my kno	wledge, 1	that all inf	form	ation reported	on this UAA
Signed: $\underline{\hspace{1cm}}$	ly!			essenter		_Date:_	03-16-0	5		
Organization:_	TETO	A TELH I	NC.			_ Positio	n: Assoc	3A76	Scientist	···
	ST	L-	03-1	6-	05				Scientist	





Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: 126	•		Site Loca			
Site GPS Coordinates:	139.65049 WOY4	.03360	ACCHAS AT NOU	70 13 C	4035ING,	
Date & Time: 03-16-0				Name: K	INGSTON WWTF	
Personnel: CHAR GANG	A YMANUG: AUG	obje~				
Current Weather Condi	tions: 49°F, Sun	~4		Conditio	ons for Past 7 days:	
Photo Ids: Upstream:	■		m: 1530 B	Other:		
ses Observed*:						
☐ Swimming	☐ Skin diving		☐ SCUBA diving	3	☐ Tubing	☐ Water skiing
☐ Wind surfing	☑ Kayaking		☐ Boating		☑ Wading	☐ Rafting
☐ Hunting	Frapping	>	☐ Fishing		☐ None of the above	☐ Other:
Describe: (include num	gensen MHO ?	TATED	THAT A FA		PHIS KANAKS TURS	
Describe: (include num SPOKE TO LOCAL I AREA SURNOUNDED	PERSON WHO S	TATED IAE & 1	THAT A FAS	JE~D 0¹		Cneek,
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Describe: (include num SPOKE TO LOCAL (AREA SURREUNDED urrounding Conditions of interest.)	PENSAN WHO S BY AGRICULTA INS*: (Mark all tha	TATEO	THAT A FATE	tional us	es. Attach photos of evide	nce or unusual
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Describe: (include num SPOKE TO LOCAL (AREA SURREUNDED urrounding Condition ems of interest.) City/county parks Boating accesses No trespass sign	ns*: (Mark all tha	i promot	THAT A FINE FORGS T. te or impede recrea IDC conservation I	tional us	es. Attach photos of evidences	CAEEK. Ince or unusual Campgrounds Stairs/walkway
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other items that may be of interest. (Include photographs)

September 29, 2004

STR-03/16/05

Page 18

^{*}Some of this information is not intended to directly influence a decision on any one particular recreational use analysis but may point to conditions that need further analysis or that effect another use.

Page Two – Data Sheet B for WBID # 126

St	ream Morp Upstream			ysical Di	mensio	ns: օ.Վ _{Ն,}	, ბიპი _{ეი} ვ _ი ე	134,0,40	^			
		Width (gth (ft):		Avg. Depth		·	Max. Depth (f	t):
	Run	Width ((ft):	1.5	Leng	gth (ft): 🤫)~	Avg. Depth	1 (ft): 0,35	'n	Max. Depth (f	D: 8.400
	□ Pool	Width ((ft):		Leng	gth (ft):		Avg. Depth			Max. Depth (fi	
	☑ Flow	Present	?	Z Yes	□ No			Estimated (ft³/sec): 4 _~	295:4	no16: 4no12,	,
	Downstrea	m Vie	T W	Physical	Dimon	sions. a					FLOU = 0:38 M	1>
	Downstrea ☐ Riffle	Width (nysicai		th (ft):		Avg. Depth		<u> </u>	Max. Depth (ft	١.
		Width (46	<u>-</u>	th (ft): 2			(ft): 6173			
		Width (لمحال		th (ft):		Avg. Depth		~	Max. Depth (ft	
		Present		☑ Yes							Max. Depth (ft	
	LL TIOW	1 ICSCIII	-	ш 163	LJ 140			Estimated (11 /SCC). 4 _{.M}	=175;4. T	m=16s;4m=18. Flow=0,24n1	<u> </u>
Su	bstrate*: (These v	alue	s should a	dd up to	100%.)				L	FLOW - 0784 AT	
	%	Cobble	上		Gravel	90	% Sand		% Silt	10	% Mud/Clay	% Bedrock
N:	oter Charac						·					
		***		Sewage		lusky	☐ Cher	nical	None		☐ Other:	
	Color:			Clear	⊠G	reen	☐ Gray	· · · · · · · · · · · · · · · · · · ·	☐ Milky		☐ Other:	
	Bottom Depo			Sludge	□ Sc	olids	☑ Fine	sediments	□ None		Other: Sawi	>
	Surface Depo	osit:		Oil	□ Sc	um	☐ Foan	n	☑ None		□ Other:	
Thomeci, that	is information prehensive un sion on the re the undersignsheet is tr	n is not onderstand creation gned, I	to be ding to use here	e used sole g of water e analysis b eby affir ccurate.	ly for rencondition out may p	noval of a ns. Conse point to co	a recreationa quently, this anditions tha	d use designs information to need furth wledge, t	nation but ra on is not inte er analysis hat all int	or that en	o provide a more directly influence ffect another use.	: a
-c				TR-		16	03	FOSITIO	II	enio d		· · · · · · · · · · · · · · · · · · ·





Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: リスフ	•		Site Location		
Site GPS Coordinates: N	34.68610 W094.1304	8 Acc: 38.9 Ft	AT ROUTE D	Chossive	•
Date & Time: 63-16-0				: KINGSTON WWTF	
Personnel: CHAD BANK		OBEEN	Permit Number		
Current Weather Condit			Weather Cond	litions for Past 7 days:	
Photo Ids: Upstream:		vnstream: 15	83 ts Ot	her:	
ses Observed*:				. •	
	☐ Skin diving		CUBA diving	☐ Tubing	☐ Water skiing
☐ Wind surfing	☑ Kayaking	□Во	oating	☑ Wading	☐ Rafting
☐ Hunting	☐ Trapping	BFh	shing c&₽	☐ None of the above	ve D Other:
AGRILLYUNG.	CD THAT A FRI	eno of H	IS KAYAN TI	173 Ravok Arfa S	WAROUNDED BY
Urrounding Condition	·				
AGNALLIANG	·	promote or in			
urrounding Condition	ns*: (Mark all that p	promote or in	npede recreationa	I uses. Attach photos of e	evidence or unusu a l
urrounding Conditionems of interest.)	ns*: (Mark all that p	promote or in	npede recreationa onservation lands I forests	I uses. Attach photos of e	cvidence or unusual Campgrounds Stairs/walkway
urrounding Conditioners of interest.) City/county parks Boating accesses	ns*: (Mark all that purchased of Playgrounds) State parks Fence	oromote or in MDC co	npede recreationa onservation lands I forests	l uses. Attach photos of e Urban areas Nature trails	cvidence or unusual Campgrounds Stairs/walkway
AGNACOL TOME urrounding Condition ems of interest.) City/county parks Boating accesses No trespass sign	ns*: (Mark all that purchased of Playgrounds) State parks Fence	oromote or in ☐ MDC co ☐ Nationa ☑ Steep slo	npede recreationa onservation lands I forests	l uses. Attach photos of e Urban areas Nature trails	Campgrounds Stairs/walkway
Urrounding Conditioners of interest.) □ City/county parks □ Boating accesses □ No trespass sign	ns*: (Mark all that purchased of Playgrounds State parks Fence	oromote or in MDC co Nationa Steep slo	npede recreationa onservation lands I forests	Urban areas □ Nature trails □ Other: AGGGC	Campgrounds Campgrounds Stairs/walkway

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

JTR 03-16-05

^{*}Some of this information is not intended to directly influence a decision on any one particular recreational use analysis but may point to conditions that need further analysis or that effect another use.

Stream Morphology: Upstream View Physical Dimensions: Width (ft): ☐ Riffle Length (ft): Avg. Depth (ft): Max. Depth (ft): Width (ft): □ Run Length (ft): Avg. Depth (ft): Max. Depth (ft): Width (ft): N 200 Pool Length (ft): MIA Avg. Depth (ft): Max. Depth (ft): NA ☑ Flow Estimated (ft3/sec): 760 Show Too MEANNE: Too WINDY Present? ☑ Yes □ No * - STREAM TOO DEEP TO MEALURE. **Downstream View Physical Dimensions:** Width (ft): ☐ Riffle Length (ft): Avg. Depth (ft): Max. Depth (ft): Width (ft): □ Run Length (ft): Avg. Depth (ft): Max. Depth (ft): Pool Width (ft): 230W * Length (ft): Avg. Depth (ft): Max. Depth (ft): Estimated (ft3/sec): Too SLOW MEASURE: TOO WINDY Flow ☑ Yes Present? □ No * STREAM TOO DEEP TO MEASURE Substrate*: (These values should add up to 100%.) NIA TOO DEEP % Cobble % Gravel % Sand % Silt % Mud/Clay % Bedrock Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site) NIA- STREAM TOO DEEP AND TURBID Water Characteristics*: (Mark all that apply.) Odor: ☐ Sewage Mone None ☐ Musky ☐ Chemical ☐ Other: Color: ☑ Green Milky ☐ Clear ☐ Gray ☐ Other: **Bottom Deposit:** ☐ Sludge ☐ Solids ☐ Fine sediments □ None ☐ Other: NA Surface Deposit: □ Oil ☐ Scum ☑ None ☐ Foam ☐ Other:

Comments: Please attach additional comments (including information from interviews) to this form.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: CM ON	Date: 03-16-05
Organization: TETHA TUCH INC.	Position: ASSESTATE & TEATTS T
JTR-07-16	- 05

^{*}This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.





Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: () Site GPS Coordinates: 3 Date & Time: 3-(%)	9.680 25/	7	2/175	Site Local		•	
· · ·	1 1 W 1/1 W 1/1 /	-441	2/175	(p) (h)		LIVAR D. C. mare.	
Date & Time: 2-10-5		-094.1	31149 T	~ bu	tox	LIKEE D CROSSES	• • •
J (40 %	5/ 8:30am			Facility N	ame:		
Personnel: AK A	MG			Permit Nu	mber:		
Current Weather Condition	ns:			Weather (Conditio	ons for Past 7 days:	
Photo Ids: Upstream:	1 Ca1694]	Downstrea	m: 28 68	2 1683	Other:		
US			CÚ15				
es Observed*:						T****	<u> </u>
Swimming	☐ Skin divin	g	□ scu	BA diving		☐ Tubing	☐ Water skiing
☐ Wind surfing	Kayaking/	Consting	☐ Boat	ing		☐ Wading	☐ Rafting
☐ Hunting	Trapping		Fishi			☐ None of the above	☐ Other:
				-	_	locumentation of evidence	of recreational uses, etc
Assumed ac	tukus 1	rased	in l	o catin	-t Cr	nd (times	•
In 14 Murch	my Strop	ed to	talk				
Mike Murph	my Stoppa	ed to	talk	· -			
	hy Stoppe	ed to	talk	• <u> </u>		e de la companya de	
	hy Stoppe	d to	talk	• <u>-</u> .			
Morning rope for	nd.	cd to	talk	_			· · · · · · · · · · · · · · · · · · ·
Moving rope fur	nd.	cd to	talk	_	ional us	es. Attach photos of evide	nce or unusual
Moving rope fur	nd.	nat promo	te or impo	_		es. Attach photos of evide	nce or unusual
Moving rope fun rrounding Condition as of interest.) □ City/county parks	M. S*: (Mark all ti	nat promo	te or impo	ede recreat		T	☐ Campgrounds
moving rope functions of interest.) City/county parks Boating accesses	S*: (Mark all the Playground	nat promo	te or imposed to Constitutional for	ede recreat servation la orests		☐ Urban areas	T
Moving rope fun rrounding Condition as of interest.) □ City/county parks	S*: (Mark all the Playground State parks	nat promo	te or impo	ede recreat servation la orests		☐ Urban areas ☐ Nature trails	☐ Campgrounds
rrounding Condition as of interest.) City/county parks Boating accesses	S*: (Mark all the Playground State park)	nat promo	te or imposed to Constitutional for	ede recreat servation la orests		☐ Urban areas ☐ Nature trails	☐ Campgrounds
Moving rope functions of interest.) City/county parks Boating accesses No trespass sign	S*: (Mark all the Playground State park)	nat promo	te or imposite teep slop	ede recreat servation la orests	ands	☐ Urban areas ☐ Nature trails	☐ Campgrounds
Moving rope functions of interest.) City/county parks Boating accesses No trespass sign	S*: (Mark all the Playground State park)	nat promo	te or imposite falls. ADC constitutional for teep slope	ede recreat servation la orests	ands	☐ Urban areas ☐ Nature trails ☐ Other:	☐ Campgrounds ☐ Stairs/walkway

September 29, 2004

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Page Two – Data Sheet B for WBID # 127 - (16 64 7 5 3 7

Stream Mor <u>p</u> <u>Upstream</u>		': Physical Dir	nensions:	1.8	.8.,0		•	
□ Riffle	Width (1	t):	Length (ft):	A	vg. Depth	(ft):	Max. Depth (ft):	
☐ Run	Width (1	t):	Length (ft):	A	vg. Depth	(ft):	Max. Depth (ft):	
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Width (1	i): 23m	Length (ft):	20m A	vg. Depth	(ft): 0.9m	Max. Depth (ft):	lilm
Flow	Present?	Yes	□ No		stimated (f		Slow to measu	ve
Downstrea	am Viev	w Physical	Dimensions: .	75.185	.9.8	1.7		
☐ Riffle	Width (f	t):	Length (ft):	, ,	vg. Depth	(ft):	Max. Depth (ft):	
□ Run	Width (f	ît):	Length (ft):	A	vg. Depth	(ft):	Max. Depth (ft):	
S Pool	Width (f	t): 13m	Length (ft):	2-om A	vg. Depth	(ft): O. 8m	Max. Depth (ft):	8-Min
Flow	Present?	\$ /	□ No		stimated (f		la forcasina	,
iubstrate*:	(These v	alues should a	dd up to 100%.)					
	Cobble		Gravel Sc	% Sand		% Silt	% Mud/Clay	% Bedrock
	Non				*	·		
Vater Chara	cterist	ics*: (Mark a	all that apply.)					
Odor:		□ Sewage	☐ Musky	☐ Chem	nical	None	Other:	
Color:		□ Clear	Green	Gray		Milky	☐ Other:	
Bottom Dep	osit:	□ Sludge	☐ Solids	Fine	sediments	□ None	☐ Other:	
Surface Dep	posit:	□ Oil	□ Scum	☐ Foam	l	None	☐ Other:	
This informatic omprehensive u ecision on the r	on is not of anderstanderstanderstanderstanderstanderstanderstanderstanderstanderstanderstanderstanderstanders	to be used sole ding of water use analysis hereby affi	ely for removal of a conditions. Conse but may point to co	a recreationa equently, this conditions that	l use design information t need furth wledge, t	nation but rather on is not intended ner analysis or the chat all inform	rviews) to this form. is to provide a more I to directly influence a at effect another use. nation reported on	
Organization:	To	- BLT			Positio	n:	Î.	
			M	(m	i JA	uly	1. 3+195	
Septem	ber 29, 2	.004					Pag	ge 19





Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: 128			Site Location		
Site GPS Coordinates:	V39.67422 WO14.	73779 845	r store	MAST	: · ·
Date & Time: 03-16-0				: KINGSTON WWTF	
Personnel: CHAV BAN	BOUR SERAMY B	ा टेस हरू	Permit Numb	er:	
Current Weather Condit	ions: 44°F, 5000	Y	Weather Con	ditions for Past 7 days:	
Photo Ids: Upstream:	535 b Do	wnstream: 15	34 6 0	her:	
es Observed*:					
☐ Swimming	☐ Skin diving		CUBA diving	☐ Tubing	☐ Water skiing
☐ Wind surfing	☐ Kayaking		ating	☐ Wading	☐ Rafting
☐ Hunting	☐ Trapping	□ Fis	hing	None of the above	☐ Other:
VERY CHALLOW, N	9 N708 96701				
rrounding Conditio			npede recreations	al uses. Attach photos of evide	ence or unusual
		promote or in	npede recreation		ence or unusual
rrounding Conditions of interest.)	ns*: (Mark all that	promote or in	onservation lands		
arrounding Conditions of interest.) City/county parks	ns*: (Mark all that	promote or in	onservation lands	Urban areas	☐ Campgrounds ☐ Stairs/walkway
rrounding Conditions of interest.) City/county parks Boating accesses No trespass sign	ns*: (Mark all that Playgrounds State parks Fence	promote or in MDC co	onservation lands	☐ Urban areas ☐ Nature trails	☐ Campgrounds ☐ Stairs/walkway
rrounding Conditions of interest.) City/county parks Boating accesses No trespass sign	ns*: (Mark all that Playgrounds State parks Fence	promote or in MDC co	onservation lands	☐ Urban areas ☐ Nature trails	☐ Campgrounds ☐ Stairs/walkway
rrounding Conditions of interest.) City/county parks Boating accesses No trespass sign	ns*: (Mark all that Playgrounds State parks Fence	promote or in MDC co Nationa Steep slo	onservation lands I forests opes	☐ Urban areas ☐ Nature trails ☐ Other: AGAZCULT	☐ Campgrounds ☐ Stairs/walkway

other items that may be of interest. (Include photographs)

*Some of this information is not intended to directly influence a decision on any one particular recreational use analysis but may point to conditions that need further analysis or that effect another use.

JTR-03-16-05

Page Two - Data Sheet B for WBID #_	128	
Stream Morphology:		

☐ Riffle	Width (f	:):	Leng	gth (ft):	A	vg. Depth	ı (ft):	Max. Depth (ft):	
☑ Run	Width (f): 5.7m	Leng	gth (ft): ລະ	or A	vg. Depth	(ft): 0.37m	Max. Depth (ft):	8.70m
☐ Pool	Width (f	:):	Leng	gth (ft):	А	vg. Depth	ı (ft):	Max. Depth (ft):	
☑ Flow	Present?	☑ Yes	□ No		E	stimated (ft³/sec): 455	ع 4m=15; 4m=15; خانة	•
							<u> </u>	2125.0 <m61< td=""><td>·····</td></m61<>	·····
Downstrea	m Viev Width (f			sions: o. gth (ft):				No. 10 11 (A)	
						vg. Depth		Max. Depth (ft):	
): 7.5 _m		gth (ft): და		· · · · · · · · · · · · · · · · · · ·	(ft): 0,09M	Max. Depth (ft):	0.13m
	Width (f			gth (ft):		vg. Depth		Max. Depth (ft):	
Flow	Present?	☑ Yes	□ No		E	stimated (123 4m=125; 4m=12;	<u>, </u>
ostrate*: (These v	lues should s	ndd un to	100%)				- LOW = 0.33 mls	
	Cobble		Gravel	70	% Sand	25	% Silt	% Mud/Clay	% Bedrock
uatic Vege	Poch:	,-very \$	MALL A	imovat.	algal growth	at the ass	essment site)		
	cterist	VORY S CS*: (Mark	all that a	imovat.	algal growth		essment site)	☐ Other:	
ALGAE ON	cterist	,-very \$	MALL A all that a □ N	pply.)			⊠ None		
ALGAE ON ter Chara Odor:	cterist	CS*: (Mark ☐ Sewage	all that a	pply.)	☐ Chem			☐ Other: ☐ Other:	
ter Chara Odor: Color: Bottom Depo	cterist	cs*: (Mark ☐ Sewage ☐ Clear ☐ Sludge ☐ Oil	all that a	pply.) Musky Green Solids	☐ Chem☐ Gray☐ Fine s☐ Foam	nical sediments	☑ None ☐ Milky ☐ None ☑ None	☐ Other:	





Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: 124			Site Locatio					
Site GPS Coordinates: N	39.60081 W 094, 21	Bagh Accidof	U AT NE 280	TH ST. OVERPA	13.			
Date & Time: 03-16-05				ne: KINGSTON	WWTF			
Personnel: CHAD BANG	OUN' JERAMY R	566~	Permit Num					
Current Weather Condition			Weather Co	nditions for Past	7 days:			
Photo Ids: Upstream: 1574 B Downstream: 13			575 B (575 g Other:				
s Observed*:								
☐ Swimming	☐ Skin diving	□ sc	CUBA diving	☐ Tubing	,	☐ Water skiing		
☐ Wind surfing	☐ Kayaking		pating	□ Wading		☐ Rafting		
☐ Hunting	Trapping CO			<u> </u>	f the above	Other:		
31 IE COLATOD IN	VENY HUNAL	HGNJCVL	TURAL AMBA	•				
SITE LOCATED IN					hotos of evide	ence or unusual		
·	18*: (Mark all that	promote or in		nal uses. Attach p	·	·		
rounding Conditions of interest.)		promote or in	npede recreation	nal uses. Attach p	areas	☐ Campgrounds		
rounding Condition s of interest.) □ City/county parks	ns*: (Mark all that ☐ Playgrounds	promote or in	npede recreation onservation land	al uses. Attach p s	areas	☐ Campgrounds ☐ Stairs/walkway		
rounding Conditions of interest.) ☐ City/county parks ☐ Boating accesses ☐ No trespass sign	S*: (Mark all that ☐ Playgrounds ☐ State parks ☐ Fence	promote or in MDC co	npede recreation onservation land	al uses. Attach p s	areas trails	☐ Campgrounds ☐ Stairs/walkway		
rounding Condition s of interest.) City/county parks Boating accesses	S*: (Mark all that ☐ Playgrounds ☐ State parks ☐ Fence	promote or in ☐ MDC co ☐ Nationa ☐ Steep slo	npede recreation onservation land	al uses. Attach p S Urban Nature Other:	areas trails	☐ Campgrounds ☐ Stairs/walkway		
rounding Conditions of interest.) City/county parks Boating accesses No trespass sign	S*: (Mark all that Playgrounds State parks Fence	promote or in MDC co Nationa Steep slo	npede recreation onservation land I forests opes	al uses. Attach p s	are as trails A GA ECULTUA	☐ Campgrounds ☐ Stairs/walkway		

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

*Some of this information is not intended to directly influence a decision on any one particular recreational use analysis but may point to conditions that need further analysis or that effect another use.

INR 03/16/05

Page Two - Data Sheet B for WBID # 129

☐ Riffle	Width (ft)	:	Length (ft):	Avg.	Depth (ft):	Max. Depth	ı (ft):
E Run	Width (ft)	: 9m	Length (ft):	∂ò∽ Avg.	Depth (ft): 0.03^	Max. Depth	ر (ft): مرایت
□ Pool	Width (ft)		Length (ft):		Depth (ft):	Max. Depth	
☑ Flow	Present?	Yes	□ No	Estim	ated (ft³/sec): lag -	45: m=45: lm=5	
					3277	FLOW = 0.23.	415
Downstrea	am View	Physical	Dimensions:	1.04,0.12,01	mc0.0,1.6,1		
☐ Riffle	Width (ft)	•	Length (ft):	Avg.	Depth (ft):	Max. Depth	(ft):
☑ Run	Width (ft)	:- 3,4m	Length (ft): 7	?o _∼ Avg.	Depth (ft): 0,030	Max. Depth	(ft): 0.12m
☐ Pool	Width (ft)	:	Length (ft):	Avg.	Depth (ft):	Max. Depth	(ft):
☑ Flow	Present?	□ Yes	□No	Estim	ated (ft³/sec):4 _m =	355) 4m=42014m	=2)5
						FLOW = 0.12m	
	(These val		add up to 100%.) Gravel 70	% Sand	% Silt	is # Mud/Class	0 D. I
1.5 70	Copple	7	Glavel 78	% Sand	% Siit [15 % Mud/Clay	% Bedroc
ıter Chara	acteristic	s*• (Mark	ell that ennly)				
ater Chara			all that apply.)	[] Chemical	M None	[] Other:	
		Sewage	☐ Musky	☐ Chemical	☑ None	Other:	
Odor: Color:		Sewage Clear	☐ Musky	☐ Gray	☐ Milky	☐ Other:	
Odor:	posit:	Sewage	□ Musky □ Green □ Solids	☐ Gray ☐ Fine sedir	☐ Milky	☐ Other:	
Odor: Color: Bottom Dep	posit:	Sewage Clear Sludge	☐ Musky	☐ Gray	☐ Milky	☐ Other:	
Odor: Color: Bottom Dep Surface Dep	posit:	Sewage Clear Sludge	☐ Musky ☐ Green ☐ Solids ☐ Scum	□ Gray □ Fine sedir □ Foam	☐ Milky nents ☐ None ☐ None	☐ Other:	form.
Odor: Color: Bottom Dep Surface Dep mments: F	posit: Please att	Sewage Clear Sludge Oil ach additi	☐ Musky ☐ Green ☐ Solids ☐ Scum conal comments	☐ Gray ☐ Fine sedin ☐ Foam (including info	☐ Milky nents ☐ None ☐ None ☐ Ormation from i	☐ Other: ☐ Other: ☐ Other: ☐ other:	
Odor: Color: Bottom Dep Surface Dep mments: F his information	posit: posit: Please att pon is not to	Sewage Clear Sludge Oil ach additi be used soling of water	☐ Musky ☐ Green ☐ Solids ☐ Scum onal comments ely for removal of conditions. Cons	Gray Fine sedin Foam (including info	☐ Milky nents ☐ None ☐ None Ormation from i designation but ra rmation is not inte	Other: Other: Other: ther is to provide a mended to directly influe	ore once a
Odor: Color: Bottom Dep Surface Dep mments: F his information	posit: posit: Please att pon is not to	Sewage Clear Sludge Oil ach additi be used soling of water	☐ Musky ☐ Green ☐ Solids ☐ Scum onal comments ely for removal of conditions. Cons	Gray Fine sedin Foam (including info	☐ Milky nents ☐ None ☐ None Ormation from i designation but ra rmation is not inte	☐ Other: ☐ Other: ☐ Other: ☐ other: ther is to provide a me	ore ence a
Odor: Color: Bottom Dep Surface Dep mments: F its information prehensive unision on the re the undersi	posit: Please att on is not to understand recreation t	Clear	☐ Musky ☐ Green ☐ Solids ☐ Scum conal comments ely for removal of conditions. Cons but may point to cons frm to the best	Gray Fine sedin Foam (including info	Milky nents None None None rmation from idesignation but ranarmation is not intend further analysis of	Other: Other: Other: ther is to provide a mended to directly influe	ore ence a use.
Odor: Color: Bottom Dep Surface Dep mments: F his information prehensive unision on the r he undersit asheet is t	posit: [posit:	Sewage Clear Sludge Oil ach additi be used soling of water use analysis ereby affi accurate	☐ Musky ☐ Green ☐ Solids ☐ Scum conal comments ely for removal of conditions. Cons but may point to cons frm to the best	Gray Fine sedin Foam (including info	Milky nents None None None rmation from idesignation but ranarmation is not intend further analysis of	Other: Other: Other: ther is to provide a manded to directly influence that effect another to	ore ence a use.
Odor: Color: Bottom Dep Surface Dep mments: F his information prehensive unision on the r he undersit asheet is t	posit: Please att on is not to understand recreation t	Sewage Clear Sludge Oil ach additi be used soling of water use analysis ereby affi accurate	☐ Musky ☐ Green ☐ Solids ☐ Scum conal comments ely for removal of conditions. Cons but may point to cons frm to the best	Gray Fine sedin Foam (including info a recreational use equently, this info conditions that nee of my knowled	☐ Milky nents ☐ None ☐ None ☐ None ☐ Ormation from i designation but ra rmation is not inte d further analysis o dge, that all inf	Other: Other: Other: Other: ther is to provide a manded to directly influe for that effect another to the company of the compa	ore ence a use.
Odor: Color: Bottom Dep Surface Dep mments: F his information prehensive unision on the r he undersit asheet is t	posit: po	Clear	☐ Musky ☐ Green ☐ Solids ☐ Scum onal comments ely for removal of conditions. Cons but may point to comment to the best	Gray Fine sedir Foam (including infoa recreational use equently, this infoonditions that need of my knowless	Milky nents None None None rmation from it designation but rarmation is not intend further analysis of the dige, that all infante:	Other: Other: Other: Other: ther is to provide a manded to directly influe for that effect another to the company of the compa	ore ence a use.



